Date: Sat, 16 Jan 93 17:36:33 PST

From: Info-Hams Mailing List and Newsgroup <info-hams@ucsd.edu>

Errors-To: Info-Hams-Errors@UCSD.Edu

Reply-To: Info-Hams@UCSD.Edu

Precedence: Bulk

Subject: Info-Hams Digest V93 #71

To: Info-Hams

Info-Hams Digest Sat, 16 Jan 93 Volume 93 : Issue 71

Today's Topics:

Code Class - How to make it Fun? (2 msgs)
License delay confirmed and hits another snag.
Mobile 2m/70cm Antenna Mounts ???
rec.radio.info Submission Guidelines
Welcome to rec.radio.info!
What's a Neper?

What Amateur Radio books should a library have? (2 msgs)
Zener in BC XLT-100

Send Replies or notes for publication to: <Info-Hams@UCSD.Edu> Send subscription requests to: <Info-Hams-REQUEST@UCSD.Edu> Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Info-Hams Digest are available (by FTP only) from UCSD.Edu in directory "mailarchives/info-hams".

We trust that readers are intelligent enough to realize that all text herein consists of personal comments and does not represent the official policies or positions of any party. Your mileage may vary. So there.

Date: Sun, 17 Jan 1993 00:19:23 GMT

From: haven.umd.edu!wam.umd.edu!adam@uunet.uu.net

Subject: Code Class - How to make it Fun?

To: info-hams@ucsd.edu

>

In article <1993Jan16.165756.16539@eagle.lerc.nasa.gov> fmfedor@sven.lerc.nasa.gov
(Alvin Fedor) writes:

>Does anyone know of a way to 1) "teach" code and 2) make it FUN?

>Any and all suggestions are welcome >de Wayne N8JGA

Naked with a YL would make it fun for me.

Date: Sun, 17 Jan 1993 01:13:30 GMT

From: usc!howland.reston.ans.net!spool.mu.edu!news.nd.edu!

hesmac04@network.UCSD.EDU

Subject: Code Class - How to make it Fun?

To: info-hams@ucsd.edu

In article <1993Jan16.165756.16539@eagle.lerc.nasa.gov>,
fmfedor@sven.lerc.nasa.gov (Alvin Fedor) wrote:
>
> Hi, I'm helping to teach a class for upgrade to General. It's for folks
> with 0 or 5 wpm.
>
> Does anyone know of a way to 1)"teach" code and 2)make it FUN?
>
> Most in the class have purchased the ARRL beginners set, but this is not
> enough to keep some interested in learning. The class consists of a
> fairly broad spectrum of people, we've recommended Super Morse et. al. to
> those who have access to computers. We were looking for activities or
> something to boost interest (fun).

I think one piece of good advice would be to send material which is fun to copy, not just sample QSOs. I realize that the latter is what will appear on the exam, but for someone learning the code or struggling to pick up speed, it would be a lot more interesting to copy jokes, song lyrics, humorous messages to class members, etc. Even texts from novels could be interesting--if W1AW ever sent some steamy (but not obscene) material for code practice, instead of articles from QST, just think what would happen to their listenership! Or maybe you could make up some stories to send, involving characters who are radio amateurs in soap opera type situations! You know, as in "I'm leaving you, hissed K9XYZ into her HT, because I've found an OM who is Extra Class, and I've decided to upgrade."

You are absolutely right about the importance of maintaining interest in order to boost motivation and class performance. Hope you can have some fun too!

Date: Sat, 16 Jan 1993 22:07:28 GMT From: anomaly.sbs.com!n1mpq@uunet.uu.net

Subject: License delay confirmed and hits another snag.

To: info-hams@ucsd.edu

Oh, I can't wait to get that one from the ARRL, the part about not processing a 610 until they get a copy of a license. That's baloney! Upon receipt of your 610 the VEC has (10) Ten days to forward it to the FCC. That's alright, mine is better. I upgraded to General in December, and just took the Advanced class this month. This ought to be good. :)

Tony N1MPQ AA

- -

---- Tony Pelliccio, N1MPQ/AG --- Our Repeater Motto: ------- n1mpq@anomaly.sbs.risc.net --- No codes for no-codes! ------- Real Hams Pound Brass! ----

Date: Sat, 16 Jan 1993 22:54:01 GMT

From: usc!howland.reston.ans.net!bogus.sura.net!darwin.sura.net!convex!

news.utdallas.edu!feenix.metronet.com!marcbg@network.UCSD.EDU

Subject: Mobile 2m/70cm Antenna Mounts ???

To: info-hams@ucsd.edu

In article <1993Jan16.162700.4712@ke4zv.uucp> gary@ke4zv.UUCP (Gary Coffman)
writes:

>In article <20360120@hplsla.hp.com> davidc@hplsla.hp.com (David Cook) writes:
>>I am in the market for a 2m/70cm dual band mobile antenna and I have noticed
>>that there are a number of antenna's that are available with either a
>>UHF PL259 type mount or a NMO type mount. I know what these mounts look
>>like but I am wondering what that advantages of one type over the other is.
>>The antenna I am leaning towards is the Commet B10 and it is available in
>>both mounts.

Another vote for the NMO mount. It has less loss at UHF. Remember also it is the mount of choice for commercial systems.

Marc Grant Amateur Call: N5MEI Phone# 214/530-9488 Internet: marcbg@feenix.metronet.com

Date: Sat, 16 Jan 93 02:32:28 MST

From: cs.ubc.ca!unixg.ubc.ca!kakwa.ucs.ualberta.ca!ersys!adec23!ve6mgs!rec-radio-

info@beaver.cs.washington.edu

Subject: rec.radio.info Submission Guidelines

To: info-hams@ucsd.edu

Archive-name: radio/rec-radio-info/guidelines

Last-modified: \$Date: 1993/01/15 12:00 \$

Version: \$Revision: 1.0 \$

*** rec.radio.info - Submission Guidelines and Etiquette ***

Two introductory articles about rec.radio.info are posted to this group and to news.answers every two weeks. You are now reading the second article, which explains how to submit something to rec.radio.info, and which answers some Frequently Asked Questions about the submission process. The first article is titled "Welcome to rec.radio.info", and it might be a good idea to check it out as well.

-- How do I submit something to rec.radio.info?

Two possibilities. You can use your newsreading software to just post the article to rec.radio.info, as you would do with any other newsgroup. The difference is that the software recognizes the special status of rec.radio.info as a moderated group, and will e-mail your article to me, the moderator, instead of posting it to the group.

Alternatively, you can mail your article directly to me at the following address:

rec-radio-info@ve6mgs.ampr.ab.ca

Mailing me directly is probably (a wee bit) faster, but using the transparency offered by the newsreading software is probably more convenient.

If you have any questions, or wish to deal with some administrivia with the moderator, I suggest mailing to the following address:

rec-radio-request@ve6mgs.ampr.ab.ca

-- How soon will I see my article appear?

It depends on how busy I am. Your article reaches me as mail, I have to read it first, possibly edit it, give it the stamp of approval, and finally send it on to the group.

I try to check and process the rec-radio-info mailbox at least three times a day. Since my site is UUCP connected (and in Canada, sometimes viewed as a foreign country from the US:-), the turnaround time may be somewhat lengthy. If you post a periodic article, and have shown to be trustworthy, we may allow you to post directly if the article is of a timely nature. See the section below on direct posting.

-- Should my article be in a specific format?

No. If it is not totally illegible, I will accept it, and if it does not have a correct subject-line I will correct it -- that's what a moderator is for.

However.

You could do me a big favor by making sure your article conforms to these simple requirements:

- 1) The article must present information, not discussion or requests, I will reject the article or require you to change the wording if it is worth it.
- 2) A good, descriptive Subject line.
- 3) Always mention what source you got the information from.
- 4) Don't forget to include a Followup-To header, at least if you don't want further discussion to automatically be forwarded to you, the poster, which is the default if the article is only posted to rec.radio.info.
- 5) Please try to keep commercial advertising out of the signature. One of the goals is to allow many of these messages to traverse through to Amateur Packet Radio, and even a mention of a company name can get some of the Arm-Chair lawyers up in arms :-}

As I said: if your article is appropriate I will post it even if you don't follow these guidelines, but then don't blame me for not processing it immediately. 'Perfect' articles I can send on with a couple of keystrokes. Stuff that needs minor editing is going to have to wait until I have time to do so.

Please do not waste both mine and your time by posting requests, as this is an information only news group.

-- What about cross-posting?

If you send something to rec.radio.info, just name any group you'd like to cross-post to in the Newsgroups field. Then, when I approve the article for rec.radio.info it will get automatically cross-posted to any other groups mentioned. This will also override the default Followup-To: poster, replacing it with the groups you cross posted to.

I would prefer if the group be cross-posted to the various discussion groups in the rec.radio.* heirarchy that are appropriate:

rec.radio.amateur.misc Amateur (ham) radio and related matters rec.radio.amateur.packet Amateur Packet Radio discussions rec.radio.amateur.policy Amateur Radio practices, rules, etc. rec.radio.noncomm Non commercial radio discussions rec.radio.shortwave International broadcasting on the 'HF' bands rec.radio.cb Citizens Band (27 MHz) discussion

alt.radio.scanner Scanner discussions (unsupported group)

or in the moderated group:

rec.radio.broadcasting Discussion of *domestic* radio broadcasting I will leave it up to the poster to decide which group(s) are appropriate, but reserve the right to add groups if I feel it has broader interest.

Note: rec.radio.broadcasting is also a moderated group. It *may* be necessary to 'manually' post your articles to it's moderator. If you wish the article to cross-post to rec.radio.info and rec.radio.broadcasting, place the e-mail address of - rrb@airwaves.chi.il.us - in the Cc: (carbon copy) field when you mail, and state, in the article, where you want the Followup-To: to be set. Since William Pfeiffer, the rec.radio.broadcasting moderator, is part of the moderation team for rec.radio.info, I will typically abide by his decision whether the article is appropriate for rec.radio.info.

If you post to another moderated group it may be better to make special arrangements with both moderators before posting by contacting us at our administrivia addresses.

In addition, cross-posts do not take up extra space; modern newsreaders can be configured to show you cross-posted articles only once anyway; not everybody reads rec.radio.info; and rec.radio.info was never meant to reduce the volume of the regular discussion newsgroups. But keep in mind that some of the mail gateways may filter out the informational postings (at request of the subscribers) to keep the load down.

You decide.

-- I have a regular posting with timely information, can I make arrangements to help speed up delivery by posting directly from my site?

Yes, there is! It may take a bit of chatter with the moderator, but we are willing to take responsible people and provide them the means of posting the articles directly from their site. We will try everything we can as we fully realize that DX (distant signal) and astronomical data can be somewhat transitory. We are also willing to allow regular posters of information the same courtesy, even if the information is not as timely.

We refer to this as self-moderation, which is partly based on the model for news.answer. This requires co-operation and good will to be beneficial to the community in the rec.radio hierarchy.

If you are currently maintaining (or plan to maintain) a radio-related periodic information posting, you may wish to consider cross-posting it to news.answers. Postings that are approved by the news.answers moderator for this treatment are automatically pre-approved for cross-posting to rec.radio.info (as the news.answers requirements are far more rigorous than the requirements this newsgroup ever plans to use). For more information about this option, consult the appropriate information articles and posting guidelines in news.answers.

Realize also, that even if your post is not approved for news.answers, it can still be approved for rec.radio.info. The intention is not so much to get every last bit of radio-related information on news.answers, but rather to provide an alternative avenue of approval (as well as grandfather existing maintainers of radio-related information and spare them additional bureaucratic hurdles). Again, cross-posting to either rec.radio.info or news.answers, both, or neither, is at the discretion of the poster (subject to the approval of the moderators). You decide what is most appropriate for your article.

Please remember that as an information maintainer, you are not alone. There are many others on the net who maintain and post periodic information postings, using various intermediate-to-advanced features of Usenet (usually via automated tools). Various degrees of technical support and general hand-holding are available from many Usenet veterans. Send me some E-mail describing your needs, and I'll try to help, or at least refer you to the right knowledgeable individual(s).

-- And Follow-ups?

If the only newsgroup you have specified is rec.radio.info, then the Followup-To: field will always be set to poster. If you do not want this, you must supply a Followup-To line of your own, and I will honor that one.

If you specify newsgroups to cross-post to, then the Followup-To field will be set to include all the cross-posted groups, excepting rec.radio.info itself. Again, if you do not wish this behavior, supply your own Followup-To line.

-- Why have I received no reply from you?

I never reject anything in silence, and I make a point of it to answer all my mail. However, e-mail can and does get lost, every now and again.

So, if you send me something, and you don't see it appear it rec.radio.info, and you still have not heard from me in reply after say, one week, you can be pretty sure that either your mail never reached me, or that my answer has never reached you. In that case, please try again.

- -

Mark Salyzyn -- Moderator rec.radio.info Submissions to: rec-radio-info@ve6mgs.ampr.ab.ca Administrivia to: rec-radio-request@ve6mgs.ampr.ab.ca

Date: Sat, 16 Jan 93 02:32:10 MST

From: cs.ubc.ca!unixg.ubc.ca!kakwa.ucs.ualberta.ca!ersys!adec23!ve6mgs!rec-radio-

info@beaver.cs.washington.edu

Subject: Welcome to rec.radio.info!

To: info-hams@ucsd.edu

Archive-name: radio/rec-radio-info/welcome
Last-modified: \$Date: 1993/01/15 12:00 \$

Version: \$Revision: 1.0 \$

*** Welcome to rec.radio.info! ***

Welcome to rec.radio.info, a group that aims to provide a noise-free source of information and news for the entire rec.radio hierarchy.

Two introductory articles about rec.radio.info are posted to the group and to news.answers every two weeks. You are now reading the first article, which explains what rec.radio.info is, and answers some Frequently Asked Questions. The second article is titled "Submission Guidelines", and you only need to read it if you want to submit an article to rec.radio.info.

-- What is the purpose of rec.radio.info?

The purpose or charter of rec.radio.info is to provide the Usenet community with a resource for information, news, and facts about any and all things radio.

All the other rec.radio groups are intended for discussions and general chit chat about radio. Rec.radio.info will contain informational, factual articles only. Follow-ups are redirected to an appropriate other group, and further discussion (if any) will not take place in rec.radio.info.

In order to ensure that rec.radio.info contains only appropriate articles, it was decided to create the group as a moderated newsgroup.

-- What is a 'follow-up', and what does 'moderated' mean?

If you are new to Usenet and are not familiar with the terminology, you might want to read the general introductory articles found in the newsgroup news.announce.newusers. Doing so will make your life on the net much easier, and will probably save you from making silly beginner's mistakes.

If you think that at this moment you are reading an echo, a conference, or a bulletin board, I'd also strongly suggest a trip over to news.announce.newusers.

For the rest of this article, I will assume you have a basic knowledge of Usenet terminology and mechanics.

-- OK, so now I know what 'moderated' means. Tell me more.

Rec.radio.info is a moderated newsgroup, which means that all articles submitted to the group will have to be approved by the moderator first.

The current moderator of the group is Mark Salyzyn. Submissions to rec.radio.info can be posted, or e-mailed to:

rec-radio-info@ve6mgs.ampr.ab.ca

Comments, criticisms, suggestions or questions about the group can be e-mailed to:

rec-radio-request@ve6mgs.ampr.ab.ca

But before you do so, please be sure to check out the "Submission Guidelines" article.

The influence of the moderator should be minimal and of an administrative nature, consisting chiefly of weeding out obviously inappropriate articles, while making sure correct headers etc. are used for the appropriate ones.

-- What type of material is considered inappropriate?

There are three broad categories of articles which will be rejected by the moderator:

- Requests for information: rec.radio.info is strictly a one-way street. I
 receive information in my mailbox; I then post it to rec.radio.info.
 Requests for specific information belong in the normal discussion newsgroups.
 If your request gets answered, you might consider passing the answer on to
 rec.radio.info, though. Especially if you can edit it into a informational,
 rather than a discussion, format.
- 2) Obvious discussion articles, or articles that appear unsubstantiated.
- 3) Commercial stuff: a relatively unbiased test of a radio product would be accepted, but any hint of for-profit might be reason for rejection. For three reasons: This is not the purpose of the list, for-profit is a controversial topic, and this list may be passed onto Amateur Packet Radio (where for-profit is prohibited except under certain provisos).

rec.radio.swap may be more deserving of the posting in any matter.

Similarly, copyrighted material generally cannot be used. If it's TRULY worthwhile to the net, I would recommend obtaining permission from the copyright holder. Please note the source, and if permission was given. I reserve the right to make the final decision concerning appropriateness in all situations. In most cases, a brief summary of, or pointer to, the copyrighted information may be all I can allow.

-- Will the material appearing in rec.radio.info be archived somewhere?

Yes. Still firming up details at the moment but here is a preliminary list:

- unbc.edu as maintained by Lyndon Nerenberg <lyndon@unbc.edu>
- nic.funet.fi maintained by Risto Kotalampi <rko@cs.tut.fi> saved to /pub/dx/text/rec.radio.info currently stored as numbered files.

Effectively this means that anything you post to rec.radio.info will be permanently stored, so your work will not be lost.

-- I have a regular posting with timely information, is there a way to speed up it's delivery, or automate for more convenience?

Yes, there is! It may take a bit of chatter with the moderator, but we are willing to take responsible people and provide them the means of posting the articles directly from their site. We will try everything we can as we fully realize that DX (distant signal) and astronomical data can be somewhat transitory. We are also willing to allow regular posters of information the same courtesy, even if the information is not as timely.

We refer to this as self-moderation, which is partly based on the model for news.answer. This requires co-operation and good will to be beneficial to the community in the rec.radio hierarchy.

I suggest reading the posting guidelines for more information. I am open to suggestions.

- -

Mark Salyzyn -- Moderator rec.radio.info Submissions to: rec-radio-info@ve6mgs.ampr.ab.ca Administrivia to: rec-radio-request@ve6mgs.ampr.ab.ca * Requests for information do *not* belong in rec.radio.info *

Date: 16 Jan 93 13:58:55 -0700

From: cs.ubc.ca!mala.bc.ca!wagner@beaver.cs.washington.edu

Subject: What's a Neper?
To: info-hams@ucsd.edu

In article <9301151521.AA01233@yahtzee.cit.cornell.edu>,
kfeeney@KLONDIKE.CIT.CORNELL.EDU writes:

- > One of the crew on the morning repeater came up with this the other day and
- > we can't find a reference for it. He says a Neper = 8.686 db, but we don't
- > know why a specific term was given to that ratio, or what industry uses it.
- > Can anybody enlighten us?

>

- > Kevin WB2EMS
- > ------
- > Sign at the flying club ops shack "We find dumb questions easier to deal with
- > than stupid mistakes."

Boy, you brought back some old recollections of college days.

I checked the IEEE standard dictionary of terms as it's been a few years (don't ask how few) sine this one came up.

Your crew is right, except for one point. 1 NEPER is equal to .8686 bel (ok, cares about deciversus).

The original description says about as much as the word itself and I quote:
"a division of the logarithmic scals such that the number of nepers is equal
to the natural logarithm of the scalar ratio of two currents or two voltages"

Aren't you glad you asked now?

There is much more but the ultimate is and once again I quote "the neper is a dimenionless unit"

Boy does that clear up a lot!

OK, so what good is this "dimensionless unit". The neper is important in calculation of transmission characteristics.

Not being able to enter formulas properly with the editor this system allows I am at a loss to forward all the formulas on this subject.

Suffice it to say, you could have a heck of a lot of fun with this fellow. In our push button world I would be interested to know if anyone ever calculates these characteristic anymore.

73, Tom AKA VE7GDA

Date: 16 Jan 93 22:22:05 GMT From: news-mail-gateway@ucsd.edu

Subject: What Amateur Radio books should a library have?

To: info-hams@ucsd.edu

- > Our local public library has apparently received special funding to
- > expand its holdings of books in the 621.???? area (technology area
- including amateur radio.) I'd like to present them with a list of
- > books that should be contained in any reasonably well stocked library.

Check to see what they have on the shelf now. It's probably pretty old and borderline unusable, but if they have a 1990/1991/1992 Handbook, a 1993 won't be that different.

Avoid license manuals. They go out of date pretty quickly - unless someone's going to keep the library up to date, it's not the best bet. Video tapes also age. it's been awhile since the "New World of Amateur Radio" was done. It's due for a facelift.

Generally, reference works do best.

ARRL Handbook & other HARDBOUND publications...paperbacks seem to not like library shelves very well. Check out RSGB publications and other technical sources - may find some interesting titles.

Go with paperbacks only when there is no other options.

You might be able to find some of "last year's" handbooks in stock and get a good price for them resulting in more books for more branches.

Review your selections to try to estimate if it will be of use. Avoid "cutesy-pie" writing (the libraries here have several copies of the "CB Slanguage Lanuguage" books collecting dust on the shelf 8)).

put at least one set of Radio Amateur Callbooks on reserve in the reference section of the main library at least. if possible, try to plan to update 'em every other year or so (maybe north american this year then international next year). If the library has a CD Rom jukebox, old versions of the Buckmaster materials can be contributed (assuming the viewing systems can run PC based code).

that should be a good start.

bill wb9ivr

Date: Sat, 16 Jan 1993 22:56:04 GMT

From: usc!howland.reston.ans.net!bogus.sura.net!darwin.sura.net!convex!

news.utdallas.edu!feenix.metronet.com!marcbg@network.UCSD.EDU

Subject: What Amateur Radio books should a library have?

To: info-hams@ucsd.edu

In article <9301162138.AA10215@ucsd.edu>
William=E.=Newkirk%Pubs%GenAv.Mlb@ns14.cca.CR.rockwell.COM writes:

```
Our local public library has apparently received special funding to
>>
    expand its holdings of books in the 621.???? area (technology area
>>
     including amateur radio.) I'd like to present them with a list of
>>
    books that should be contained in any reasonably well stocked library.
>>
>Check to see what they have on the shelf now. It's probably pretty old and
>borderline unusable, but if they have a 1990/1991/1992 Handbook, a 1993 won't
>be that different.
>Avoid license manuals. They go out of date pretty quickly - unless someone's
>going to keep the library up to date, it's not the best bet. Video tapes also
>age. it's been awhile since the "New World of Amateur Radio" was done. It's
>due for a facelift.
>Generally, reference works do best.
>
    ARRL Handbook & other HARDBOUND publications...paperbacks seem to
>
    not like library shelves very well. Check out RSGB publications
>
    and other technical sources - may find some interesting titles.
>
>
>
    Go with paperbacks only when there is no other options.
>
>
    You might be able to find some of "last year's" handbooks in stock
    and get a good price for them resulting in more books for more
>
>
    branches.
>
>
    Review your selections to try to estimate if it will be of use.
    Avoid "cutesy-pie" writing (the libraries here have several
>
    copies of the "CB Slanguage Lanuguage" books collecting dust on the
    shelf 8) ).
>put at least one set of Radio Amateur Callbooks on reserve in the reference
>section of the main library at least. if possible, try to plan to update
>'em every other year or so (maybe north american this year then international
>next year). If the library has a CD Rom jukebox, old versions
>of the Buckmaster materials can be contributed (assuming the viewing systems
>can run PC based code).
>that should be a good start.
>bill wb9ivr
______
Date: 16 Jan 93 17:32:09 GMT
```

From: sdd.hp.com!spool.mu.edu!news.nd.edu!bsu-cs!bsu-ucs.uucp!yang.earlham.edu!

jeremiah@network.UCSD.EDU Subject: Zener in BC XLT-100 To: info-hams@ucsd.edu

Hello,

Does anyone have the following:

The value of the zener diode in the battery pack for the Uniden Bearcat BC-XLT-100 and 200? Mine is fried. This here genius plugged it in backwards.

- -

Jeremiah Wilton | jeremiah@yang.earlham.edu | JEREMIAH@EARLHAM.bitnet | NeXTmail only: jeremiah@math.earlham.edu |

Date: Sat, 16 Jan 1993 22:32:08 GMT

From: dog.ee.lbl.gov!overload.lbl.gov!agate!spool.mu.edu!uwm.edu!linac!att!

cbnewsc!k9jma@network.UCSD.EDU

To: info-hams@ucsd.edu

References <9301151628.AA09480@umassmed.UMMED.EDU>, <9301151823.AA10596@umassmed.UMMED.EDU>, <1j86jsINN4d0@darkstar.UCSC.EDU>p Subject : Re: 6C21 radar pulse tube

Good grief - haven't seen one of these in years. Its a triode characterized for pulse service from WW II radar modulator applications. You might be able to get one from Fair Radio Sales in Lima, Ohio. I think they were the same as a 450T(H?) so one of those would serve.

Are you trying to duplicate an antique or just want to run some power? I'd think a 4-1000 would be a better choice for a modern rig or maybe a 3-500 if you want something the same size as the 6C21.

73 de K9JMA

- -

Ed Schaefer AT&T Naperville, Il. jma@ihlpm.att.com

708 979 2480

End of Info-Hams Digest V93 #71 ***********
